

What is claimed is:

- 1 1. A method comprising:
2 providing a capacitor to maintain a terminal voltage of a pixel cell near a
3 predetermined voltage;
4 providing a memory to store a digital indication of the predetermined voltage;
5 and
6 during a refresh operation, converting the digital indication into an analog voltage
7 to update a charge on the capacitor.
- 1 2. The method of claim 1, wherein the memory comprises a static random
2 access memory.
- 1 3. The method of claim 1, further comprising:
2 during the refresh operation, reading the digital indication from the memory.
- 1 4. The method of claim 1, further comprising:
2 during the refresh operation, latching the digital indication.
- 1 5. The method of claim 1, further comprising:
2 updating the memory with another digital indication of another predetermined
3 voltage.

1 6. A method comprising:
2 providing capacitors, each capacitor being associated with a different pixel cell to
3 maintain a terminal voltage of the associated pixel cell near a predetermined voltage;
4 providing memory buffers, each memory buffer being associated with a different
5 one of the pixel cells and storing a digital indication of the associated predetermined
6 voltage;
7 during a refresh operation, converting the digital indications into analog voltages
8 to update charges on the capacitors.

1 7. The method of claim 6, wherein the capacitors are associated with a row
2 of pixels.

1 8. The method of claim 6, wherein the memory buffers comprise a part of a
2 static random access memory.

1 9. The method of claim 6, further comprising:
2 during the refresh operation, reading the digital indications from the memory
3 buffers.

1 10. The method of claim 6, further comprising:
2 during the refresh operation, latching the digital indications.

1 11. An light modulator cell comprising:
2 a pixel cell;
3 a capacitor to maintain a terminal voltage of the pixel cell near a predetermined
4 voltage;
5 a memory to store a digital indication of the predetermined voltage; and
6 a digital-to-analog converter to convert the digital indication into an analog
7 voltage to update a charge on the capacitor during a refresh operation.

1 12. The light modulator cell of claim 11, wherein the memory comprises a
2 static random access memory.

1 13. The light modulator cell of claim 11, further comprising:
2 bit latches; and
3 sense amplifiers to communicate the digital indication from the memory to the bit
4 latches during the refresh operation.

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1 14. The light modulator cell of claim 10, further comprising:
2 bit latches to latch the digital indication during the refresh operation.

1 15. The light modulator cell of claim 11, wherein the memory further is
2 updated with another digital indication of another predetermined voltage.

1 16. A light modulator comprising:
2 pixel cells;
3 capacitors, each capacitor being associated with a different pixel cell to maintain
4 a terminal voltage of the associated pixel cell near a predetermined voltage;
5 memory buffers, each memory buffer being associated with a different one of the
6 pixel cells and storing a digital indication of the associated predetermined voltage; and
7 digital-to-analog converters to convert the digital indications into analog voltages
8 to update charges on the capacitors during a refresh operation.

1 17. The light modulator of claim 16, wherein the capacitors are associated
2 with a row of pixels.

1 18. The light modulator of claim 16, wherein at least one of the memory
2 buffers comprises a static random access memory.

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